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ABSTRACT

A discussion of the field of contrastive linguistics (CL) begins by defining the relationship between theoretical and applied CL in terms of the concept of finalization, which originated in the philosophy of science. Then, the historical development of CL in the United States and Europe is sketched. This development is seen as characterized by a reorientation from structure-centered to process-centered analysis. Research conducted in the following areas is considered to have contributed to this change: inter- and intralingual errors, language universals, interlanguage, transfer and cognition, and discourse. It is suggested that this reorientation has helped to reduce the contrast between the two domains of theoretical and applied CL and corresponds to the shift in focus from language structure to language use in general linguistics. Sociosemiotics is proposed as a methodological and theoretical framework for CL, with social interaction across cultures as the central object in CL. This object is described on the basis of underlying cognitive processes and is explained in semiotic terms. A reference list of 127 items is appended. (Author/MSE)

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Language Processes in Contrast

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ABSTRACT

After defining the relationship between theoretical and applied contrastive linguistics (CL) by applying the concept of 'finalization', which originates in the philosophy of science (Starnberger Circle), the historical development of contrastive linguistics in the U.S. and Europe is briefly sketched. This development is assumed to be characterized by a re-orientation from structure-centred to process-centred analysis. Research conducted in the following areas is considered to have contributed to this change: (i) intra- and interlingual errors, (ii) language universals, (iii) interlanguage, (iv) transfer and cognition, and (v) discourse.

As this list comprises both elements, which are generally viewed as belonging to theoretical linguistics and elements generally considered to belong to applied linguistics, the re-orientation has helped to reduce the contrast between these two domains. This was supported by the shift from focusing on language structure to focusing on language use in general linguistics.

Sociosemiotics is proposed as a methodological and theoretical framework for contrastive linguistics: The object of CL is social (including linguistic) interaction across cultures (all behaviour is socioculturally influenced); this object is described on the basis of the underlying cognitive processes (cognition is dependent on socioculturally preordained facts) and the objects are explained in sociosemiotic terms.

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Language Processes in Contrast

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> Communication is, by its very nature, culturally relative (Tannen 1984: 194)

I. Introduction

There are few fields in the study of language where multifarious misunderstandings reign as supreme as they do in the relationship between the question what linguists do and the question why they do what they do.

In particular, the study of cross-language contrasts is an area which has been affected most severely by this state of uncertainty. The wavering attribution of the labels "theoretical contrastive linguistics" respectively "applied contrastive linguistics" bears rich evidence.

The investigation of cross-language contrasts requires the formation of theories to describe the two or more languages with the necessary amount of descriptive and explanatory adequacy and the formation of procedures how to contrast the languages thus described. There are various concepts to perform these tasks.

Frequently the task of describing is reserved for theoretical contrastive linguistics, the task of contrasting the results of the descriptions thus remaining the task of applied contrastive linguistics.

This first concept (and division of labour) is absolutely dissatisfying because the task of describing specific languages is carried out by theoretical linguistics anyway, and as the task of contrasting is reserved to applied contrastive linguistics,

actually, nothing is left to theoretical contrastive linguistics (and the theoretic contrastive linguist).

On the other hand, it is evident that the investigation of cross-language contrasts is not a matter which is of concern merely to what is traditionally called 'applied' in linguistics. Frequently a teleological attempt is used to solve this problem: if the contrasting of languages is done for its own sake, it is said to be a theoretical contrastive linguistic enterprise; if, however, the investigator has some further-reaching goal on his/her mind, and performs the task of contrasting in the interest of that goal, his/her study is said to be an applied contrastive linguistic one.

Our objection to this division actually is not the great distinguishing power which it attributes to the a priori-domain (motivation of the researcher) but rather its lack of explanatory power concerning the relation between theory and application in contrastive linguistics. As it stands, this concept suggests that there are two disciplines independent from each other: theoretical contrastive linguistics and applied contrastive linguistics.

To solve that problem recourse is frequently taken to a hierarchical relationship: like in the second concept it is the task of theoretical contrastive linguistics to describe and to contrast the languages in question (i.e. more than in the first concept); what is left to applied contrastive linguistics are the attempts to make the best of it[1] for some purpose which is usually claimed to be 'socially relevant' - whatever this may mean.

This third concept is the most widespread one - unfortunately. Elsewhere we called it 'socket-and-plug-linguistics' - where theory provides the currency coming from the socket, and application is restricted to the function of the plug -, 'recycling linguistics' - where application merely recycles the

[1] A variety of this concept is provided by Aarts (1982: 55), according to which theoretical contrastive analysis has to "provide exhaustive descriptions of the similarities and differences between languages and to have explanatory power and heuristic value", i.e. theoretical contrastive analysis is concerned with deep structure vs. applied contrastive analysis as being concerned with surface structure phenomena; the limitations of this concept coincide with the (by now well-known) limitation of the grammatical theory underlying the distinction between deep structure and surface structure: generative linguistics. As Aarts and Wekkers themselves pointed out in (1987: 10) generative transformational grammar might principally lend itself nicely as a tool for contrasting language structures, but when it comes to applying these contrastive findings, they rather advocate an ecclectic approach.

output of theoretical linguistics, 'Verwertungslinguistik' etc. The major reason why we use such derogatory terms is that the history of contrastive linguistics in particular has ample witness against this concept of a hierarchy between theoretical and applied contrastive linguistics. Not infrequently this hierarchy was turned upside down, so-called 'applied' contrastive linguistic studies furthering the development of theoretical contrastive linguistics. Perhaps more than in many other linguistic disciplines the development of contrastive linguistics has been promoted by so-called 'applied' motives, interests and motivations.

It is obvious that the need to reconsider the relationship between theory and application in linguistics is particularly urgent for contrastive linguistics. And it is equally obvious that this re-consideration should take account of the factual interdependence of theory and application in contrastive studies.

We subscribe to the hypothesis that it is not the format of models or methods of a contrastive linguistic analysis that decides on its theoretical/applied status but rather the aim which the researcher pursues with his/her study. This comes close to the second concept outlined above. Further clarification, however, is required in particular for the role of the a priori in the case of a theoretically motivated study on the one hand and for the role of theory in the case of an applied motivated study on the other hand. As a framework for coping with these questions the following model of 'Linguistics as applied Linguistics' is proposed.[2]

Linguistic research, as well as any other research, can be described as consisting of three phases: the constitutive phase, the theory-dynamic phase, and the finalizing phase.

The constitutive phase is explorative, screening, descriptive, and classifying (cf. Böhme et. al. 1978: 226) and comprises the selection of concepts, procedures and the aspects of reality to be analyzed. It is true, the constitutive phase may have a high degree of internal motivation, e.g. when the researcher's major objective is confined to repairing, stabilizing, or expanding his

[2] The basic premises of this model draw on two concepts of the philosophy of science; on the one hand Thomas S. Kuhn's 'research paradigmata' (or matrices) and on the other hand the concept 'finalization of science', developed by the Starnberger Institut. (Böhme et. al. 1978, Kuhn 1962).

basic research paradigm, i.e. when the hard core of the paradigm chosen is accepted and falsification only affects the hypotheses of its protective belt. Internally motivated/legitimated studies of this kind are usually called 'theoretical' or 'pure' studies. However, it is here frequently overlooked, that even in the case of most highly theoretical studies iternal motiviation, actually always goes along with external motivation, e.g. the sociocultural constraints which determine the researcher's selection of problems and the field of investigation, his/her personal and educational background, her/his knowledge, mode of reasoning, and his/her intellectual stance/conceptual angle, from which they perceive reality - and which may even be claimed to constitute reality.
Obviously factors which are external with regard to linguistics, and which are considered as exerting constitutive influence on applied linguistics merely, actually, matter in an a-prioric mode in theoretical linguistics, too: a major argument against all conceptions which aim at a rigorous separation of theoretical versus applied linguistics.

The constitutive phase is followed by the theory-formation phase. This phase definitely is legitimated internally. It precedes the finalizing phase which is externally legitimated. By strength of this kind of legitimation it links up with the constitutive phase. The task of the finalizing phase is to specify preceding theory-formation with respect to preconceived, finalized aims;[3] e.g. for the teaching of French to eight year old children from Portuguese guest-workers' families in Luxembourg. With this example the (external) constitutive factors are to be traced back to the desire to achieve a better mutual understanding within the European community; for this 'ultimate' goal (causa efficiens) foreign language teaching/learning in turn is a constitutive element; the theory-dynamic phase provides the linguistic theories required and relates them to those of neighbouring fields, e.g. psychology of learning, sociology etc., and the finalizing phase yields the projection onto the specific aim concerned (here the teaching of French to the group specified (causa finalis).
We noticed above that via externality the finalizing phase of research is linked to the constitutive one, whose external features even matter for theoretically oriented studies. On the

[3] In the case of linguistics, compatibility between these phases is achieved by a reducibility of matrices; e.g. the structuralist paradigm can be described as a reduction of the functional / pragmatic paradigm.

other hand our example will have demonstrated that via its task of theory-specification the finalizing phase links up with the theory-dynamic one. These considerations lead us to an integral concept of theoretical and applied linguistics (resp. better "finalized" linguistics, as proposed in detail in Kühlwein 1987).
To sum up: Linguistic studies which go all the way to a finalized aim do not stand in opposition to so-called theoretical linguistic studies. On the contrary: they contain theoretical linguistics as an indispensible and integral part (second place). For linguistic studies which do not reach that far but are content with repairing, stabilizing, and expanding a theory, a potential usefulness for society can be claimed, if they are carried out under the consciousness of the a.m. external factors which constitute them and which admit of a finalizing potential.
This concept of linguistic integrality differs essentially from what is usually called 'applied lingusitics' and which all too frequently disregards constitutive considerations, thus reducing the three research phases to two: a process which results in sporadic trial-and-error projections of preconceived linguistic theories onto practical language problems - a simple kind of socket-and-plug procedure, within which theory is supposed to provide the currency, which merely has to flow into the practical language problems; clinical linguists, (foreign) language teachers, and members of related professions are constantly experiencing the often disastrous effects which are caused by such a two-phase concept of application, if the currency turns out to be the wrong one for the practical task that has to be solved.

As for the relationship between Contrastive Linguistics and Foreign Language Teaching our intergral concept will amend evaluations like:

> Current views on pedagogical applications of contrastive studies are marked by disappointment and pessimism. (Marton 1972: 115)
>
> Contrastive analysis [...] is inadequate theoretically and practically, to predict the interference problems of a language learner [...]. (Whitman & Jackson 1972: 40)
>
> Even the contrastive grammars i.e., modern, scientifically defendable, up-to-date comparative drafts between the mother-tongue [sic!] and a foreign language, regardless which tendency they

> represent, structural or transformational, [...] are deficient form the pedagogical point of view. (Engels 1979: 14f.)

As the concept has been outlined in detail elsewhere (Kühlwein 1987, 1988), this brief outline of our concept might be sufficient to yield the integral point of view from which we would like to present the passage of cross-language studies from contrasting structures to contrasting processes.

II. Contrasting Language Structures

Europe has a great tradition in comparing languages. In the 17th century comparative studies were motivated by the interest in conceptual universal grammar. In the 18th century normative, prescriptive and language evaluative comparisons (as was the case with their Renaissance precursors) cf. Kühlwein 1975) were their focus of interest (cf. Kühlwein 1975), while comparisons with the classical languages, that is, etymological and typological comparisons, were pursued in the 19th century, and at the beginning of the 20th century they aimed to ascertain phonological-semantic correspondences and degrees of genetic relationship between languages. However, the conscious formulation of the question 'merely sporadic application' or 'directly planned finalization?' lay outside the approaches of these early European language comparisons.

Although we already find the expression "contrastive linguistics" for the first time in Whorf (1941) to my knowledge - (expressly vs. 'comparative linguistics'), this is understood exclusively within the context of the title of his article 'Languages and Logic' and it is still unambiguously oriented towards the mere recording of language differences.

In a much wider scope Trager (1949) established a general contrastive linguistics (CL) which records the differences and the similarities between several systems and moreover within a language, as a comparison of both historical strata and also of synchronic varieties, as well as those between languages. However

this is considered strictly as part of descriptive linguistics with no link-up being made with language acquisition.[4]

But then this orientation became very evident in many articles and lectures by Fries from 1945 onwards.[5] He laid the foundation stone at the University of Michigan for a form of contrastive linguistics which was understood as oriented towards pedagogical concerns; this was a direction it was to take until the late sixties for the most part in the United States, having been stimulated by interest in languages during the Second World War.

This orientation led through work by Yao Shen, Robert Lado and Kenneth Pike (all three of whom had been connected with Ann Arbor for many years), flanked by the insights which had early been gained from bilingual contexts on interference (Weinreich 1953, Haugen 1953) and on transfer (Harris 1954) right through to the wide-ranging Contrastive Structure Series edited by Ferguson in the sixties, which however viewed English in the role of a second language (L2) only. It was an approach which was able to benefit with respect to methodological problems from the first comprehensive contrastive analyses of individual language pairs (Stockwell, Schachter) and which via the Center for Applied Linguistics, Washington, D.C. could influence numerous large-scale contrastive projects particularly in (Eastern) Europe which admit to being oriented towards objectives referring to foreign language acquisition in differing degrees.

American CL in the meantime, however, met up in Europe with a tradition of relating CL and foreign language acquisition which was much older than itself. This is often overlooked perhaps simply because the label 'contrastive linguistics' is of American origin.

Besides the a.m. Eurepean mainstream of 'comparative' linguistics at least the latter part of the 19th century saw in Europe the demand for the mother tongue to be viewed in the mirror of the foreign language. Already at the turn of the century voices within comparative linguistics called for the comparison of languages outside genealogical interests and synchronically: compare

[4] Summarized in Bausch (1973: 163-166)

[5] Fries' achievement for foreign language acquisition FLA/CL can only be properly appreciated against the background of his position in relation to Bloomfield.

Baudouin de Courtenay (1912), Viëtor, Passy (contrastive phonetics), Mathesius (1927) and the Prague School surrounding him, de Saussure and many others. They were soon to bring forth materials which related to foreign language acquisition (cf. Fried 1965). And this orientation became established particularly in the USSR - perhaps also as a result of linguistic interests dating from the time of the World War - in the train of theoretical 'confrontative linguistics' which dealt with differences and similarities (cf. Akhmanova & Melencuk 1977).

Description and comparison of languages developed in Europe over a long period of time and to a great extent with reference to their cultural context or precisely on account of the same. This had led to a not unrealistic assessment of the possibilities and limitations of language comparison for FLA, in which the connection between language and culture ('Landeskunde') was not very satisfactorily developed. CL in the USA approached the FLA orientation in a far more enthusiastic fashion. This explains its subsequent, far different development. When its expectations were not satisfactorily fulfilled it disappeared from the map[6] in the seventies in the US. Whereas in Europe as a result of a lower set of expectations it was able to ride out the crisis and to incorporate in the last decade developments which affected both linguistic model formation and neighbouring disciplines. And the resultant form of foreign language acquisition/contrastive linguistics is now exerting an influence on America from Europe.

In the framework of this development one has to adjudge the almost unlimited acceptance by European CL of American structuralist positions, both taxonomic and generative varieties, in more subtle fashion. Although language description has become more rigorous - because more abstract - at the same time this has been achieved at the price of a reductionist position which has gravely affected the analysis of language use and thereby FLA.

The common criticism which holds that the approaches we have mentioned describe and compare only structures but not processes is not entirely correct: however, where they do investigate

[6] "The history of cross-linguistic influence in second-language learning is akin to the history of Poland in Europe, with ever- changing expansions and diminutions of its territory and even occasional disappearances off the map." (Kellermann 1984: 120).

processes, this tends to serve merely to illuminate intra-linguistic structures and rule mechanisms.

When e.g. James (1980) outlines what contrastive analysis should do in phonology and grammar :

> - "Inventorize the phonemes of L1 [first language, W.K.] and L2" - "State the allophones of each phoneme of L1 and L2" - "State the distributional restrictions on the allophones and phonemes of L1 and L2" (1980: 75-79)
>
> - "Assemble the data exhibiting the relevant systems in each language" - "For each language state the realisations of each grammatical category pertinent to the contrastive analysis being done" (e.g. indefinite article plus attribute) - "Supplement the data" (if any) - "Formulate the contrasts" (1980: 67-69)

this does not necessarily imply a restriction to taxonomic-structural procedures but admits of e.g. generative procedures as well. These, however, frequently misled the applied contrastive researcher to attribute psychological reality to linguistic sequences of rules - though the evidence provided by the well-nigh countless empirical investigations devoted to this problem is not at all conclusive - and to identify the sequences of foreign language learning with these (generative) rule sequences.

The basic assumptions concerning the relation between CL and FLA of this structure-oriented genre could be summarized after Aarts (1982: 48f.), James (1980: 141-165), Hansen (1985) as follows:

(a) Linguistics - in particular CL - is the most essential control discipline for the construction of language teaching materials, for the selection of what is to be taught and for grading, when it is to be taught, and also for answering the question of what and how things should be tested.

(b) The process of learning itself is regarded in the taxonomic approach within the framework of behaviourism as the formation of habits, in the generative approach as the cognitive learning of the code based on an innate language acquisition mechanism.

(c) Foreign language acquisition is characterized on all language levels by transfer of items, categories and structures of the L1, with CL discovering the points at which interference takes place.

(d) The more disparate from each other the corresponding language structures are in L1 and L2, the more difficult they are to acquire in L2.

(e) Language system analysis which is oriented towards L1/L2 differences makes possible not only the prediction of ('strong claim'), or at least the diagnostic separation between errors of an interlingual or an intralingual nature ('weak claim' - cf. Wardhaugh 1970), but also the hierarchical ordering of learning difficulties.

Our commentary from the contemporary perspective will demonstrate the limitations of this concept of CL indicate the developmental perspectives.

On point (a): in my opinion it is not, as is often noted nowadays, the narrow fixation of FLA on language structures which gives one pause for thought, but rather the secondary position which FLA takes up vis-a-vis the science of language and its structures, linguistics.[7] The latter, as is the case with all sciences, can only provide a picture of its object, language, which lies within the boundaries of its axioms, theories and methods. But structurally limited CL lacks a theory of language which would be sufficient to allow an assessment of interlingual contrasts which are dependent on their language overlapping status (Zobl 1984: 80). The too high an estimation of the science of language for the acquisition of language is also the reason why the confusion of theories in competing linguistic models inevitably led to far-reaching negative effects for the relation between CL and FLA (and to the motivation of teachers). To which of the many 'linguistics' should we entrust the tiller for CL/FLA? If we hand it over to several or all of them, to which, then, and to what extent and to do what? The wise formula, which is still current today that 'Theoretical CL demands consistency in its model and applied CL allows eclecticism' is merely an empty one and solves nothing.

[7] In the adjective 'linguistic' the distinction is not clearly made between 'linguistic' - referring to language - and 'linguistic' referring to linguistics; frequently unthinking use and confusion are the consequence.

CL became a straight jacket for FLA. People understood it - still understand it in many places (?) - to mean 'application' (vs. 'finalization'; see above).[8]

On point (b): The point of orientation for FLA was in the ergon sense the final product, the completely developed L2; this was moreover also the case for numerous psycholinguists. In the last decade a fundamental change took place which was to alter the relation of CL to FLA more radically than that to any other area of application. The hypothesis concerning the language acquisition device was first proposed for L1 acquisition. Its generalization to FLA led to one of the most violent controversies in recent CL.

On point (c): The close linking of the notion of transfer to behaviourist learning and pure system-linguistic interference prediction almost resulted in the latter's death. Thereupon the pointed isolation of the language levels from each other in taxonomic structural linguistics severely limited the power of its description and explanation for CL.

- What language A differentiates e.g. on the phonetic-phonological level might well be differentiated by language B on the lexicological, morphological or syntactic level.

- What language A differentiates on one of these levels might well be differentiated by language B beyond the sentence level; the strong concentration on emic/etic features barred the view of "the ways in which people are able to cope with their needs of communication" (Sajavaara/Lehtonen 1980: 11);

- What language A distinguishes on anyone of the above mentioned levels, might be distinguished by language B beyond the linguistic code; this, however, would have required the use of ethnographic tools to account for the sociocultural setting of utterances and the respective linguistic variations.

As a consequence for foreign learning, socioculturally determined contrasts were not accounted for by language exercises in language learning materials but were swept under the carpet of cultural

[8] A survey of methods in contrastive analysis which is very stimulating in many respects is provided by James - strictly divided according to grammatical, sound and lexical level - (1980: 61-97), all three subsumed under 'microlinguistics' (cf. 'macrolinguistics' which is communicatively oriented, includes extralinguistic factors and goes beyond the sentence).

specificities that rather had to be gleaned as by-products from literary or non-literary texts in the lessons than to be learned from ordinary language instruction.

On point (d): The hypothesis concerning the correlation between interference and learning difficulty has simply been falsified in its global claim by numerous empirical investigations. Organization of knowledge and perception on the part of learners have been neglected.

On point (e): The various hierarchies of difficulties which CL proposed certainly moved step by step in the direction of increasingly larger units, like for example in phonology from the contrast of paradigmatic systems via the comparison of sound sequences to the syllable,[9] but the 'weak claim' - which in the final analysis merely possesses a descriptive value - soon signalized the insufficiency of traditional CL as far as its predictive claims were concerned. A modification which is in the course of being pursued further is that of the markedness hypothesis (proposed by Eckman 1977): L1/L2 differences are only of difficulty for FLA if the relevant domain in L2 is more strongly marked; two points are still problematic however: the L1/L2 correspondence of 'domains' and the relativity of markedness.

Despite the claim of (e) structural CL lacked an adequate theory of FLA.

As a result of which the theory of second language acquisition has always leant towards neighbouring disciplines.[10]

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[9] This development can be traced in the well chosen selection in the anthology by Robinett & Schachter (1983).

[10] Lightbown (1984) provides rather a critical assessment of the leaning of second language acquisition towards

- linguistics: transfer of the language acquisition device onto second language acquisition (Dulay, Burt & Krashen 1982); main emphasis on syntax; dubious role of the first language; orientation rather individual than social; emphasis on the innate biological contribution of the learner rather than on the interaction with his environment.
- sociolinguistics: emphasis: rate of acquisition, proficiency levels, sociological aspect (at the cost of individual aspects), learning environment etc.
- sociolinguistics and discourse analysis: systematic variation according to learning contexts; problem: the individual aspect.
- neurolinguistics: problem: the basis itself
- psychology, in particular cognitive psychology: emphasis: memory and information processing as constituents of learning.

By complementing CL with - performance oriented - error analysis (EA) (e) was intended to be taken into account, then (a) was to be accounted for by turning to universals research,[11] whereas (b) was dealt with through ever more intensive 'interlanguage' (IL) research and (d) by turning to cognitively based CL; in order to correct (c) the traditional object area of linguistics was forced to open up beyond the sentence to text and discourse; and in particular in the latter a far-reaching opening in the direction of neighbouring human and social sciences took place. The combination of these five developments - the orientation towards performance, universals, interlanguage, cognition and discourse in interdisciplinary relief - gave rise to the basis for the current perspectives of CL: structurally limited CL was visibly transformed into process-opened CL.

Let us now separately consider the re-orientations we have mentioned.[12]

III. Contrasting Language Processes

III.0 The Perspective

As we now recall the problem which we posed initially, theory vs. application in contrastive linguistics, we will recognize that the list of these five trends which we proposed as being responsible for the shift of structural contrastive linguistics towards processual contrastive linguistics, comprises both elements that would generally be viewed as pertaining to theoretical linguistics and elements that would generally be regarded as applied. This joining of efforts from both sides, the theoretical one and the applied one, towards opening CL towards a processual conception,

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Present state of research: the multitude of descriptive second language acquisition studies, lacking theory, as opposed to an equally great number of experimental studies which, however, do not go beyond the status of "lists of observations" (245). As seen from this grid Krashen's monitor model (cf. chapter III.2 below) actually, is attributed that status of a second language acquisitional theory of its own by strength of its uniting a number of the above mentioned reference disciplines for second language acquisition: linguistic theory ('natural order'-hypothesis; though neglecting the role of L1!; sociopsychological theory ('affective filter hypothesis'), psychology of learning ('acquisition vs. learning'), and discourse analysis along with sociolinguistic theory ('monitor hypothesis').

[11] Rusiecki (1976) rightly sees Alatis' (1968) and DiPietro's (1971) data as initiating in this connection.

[12] For a less detailed outline cf. Kühlwein (1989)

has, of course, become possible by the gradual reorientation of general linguistics within these last one or two decades from focusing on language structure to rather making language use its object of research. To say the same thing in more traditional (European) terms: after concentrating on language as ergon for about four decades, its nature as energeia is being rediscovered. As for 'applied' linguistics, use of language has always been its object of research. Thus, the mainstream of present-day theoretical linguistic trends and applied linguistic concerns are converging - and this is a major reason why we proposed a concept of linguistics above, which pleads for an integral rather than an antagonistic view of theory and application. Contrastive linguistics in particular provides an outstanding example for this current trend of convergency.

Hammarström (1987: 14) states: "Nothing should be included in the description of a language unless it is possible to believe that it has a reasonably direct correspondence in the minds of the users." - and for sure he did not have in mind what is generally called applied language study. Again: the more theoretical linguistics turns to the "minds of the users" as its ultimate reference point, the more its concern will converge with what is traditionally called applied linguistics, to which "the minds of the users" have always been the concern. Even in a contrastive linguistic field which leans as much to the theoretical end of the scale of contrastive linguistics as language typology, this shift is gaining ground.[13]

III.1 Performance Analysis/Error Analysis

Error Analysis (EA) as one form of performance analysis is located on the crossroads between structural and processual contrastive linguistics. On the one hand it does not set out from the abstract language system but from actual utterances; its major concern is the description, classification, explanation and therapy of errors, and consequently the distinction between errors that are caused interlingually and others that are caused intralingually. This concern had two consequences:

[13] cf. Straková (1985: 15ff.)

(a) A more refined concept of the confrontation L1/L2 by means of a more subtle view of the various stages of acquisition of a foreign language (and of the mother tongue as well!), a look at the network of what had been called approximative systems by Nemser (1971), 'Teilgrammatiken' by Kühlwein (1973) and interlanguages by Selinker (1972) - whose term gained the day.

b) Taking proper account of the (same or different?) learning processes underlying both types of errors, the interlingual ones and the intralingual ones.

Though there seems to be general agreement concerning the heuristic value of the distinction between intralingually vs. interlingually caused errors, in practice many errors are 'multiinterpretable'; i.e. often it is hard to say which one of the two causes is the dominant one.[14]

EA also falls short of an adequate amount of explanatory power.[15]

What was also lacking - in any case in the heydays of EA - was the attempt of correlating the methodological tools as provided by linguists with those that were provided by neighbouring disciplines which are also concerned with errors, e.g. when it comes to explaining the fact that basic meanings of a term frequently are acquired without much difficulty whereas there is obvious avoidance concerning its metaphorical or idiomatic use (cf. Kellermann 1978a; cf a. Levenston 1979).

Further shortcomings - regarding (a) - are constituated by the fact that after all EA remained largely code-oriented (Sajavaara/Lehtonen 1980: 10) and tackled the various language levels from sound to sentence in rather a traditional, isolating way; and - reagarding (b) - error etiology did not open up sufficiently towards (foreign) language acquisition psychology.

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[14] As to this problem cf. Kühlwein (1973, 1975) and later Arabski (1979), Jordens (1980).

[15] I am greatly indebted to lectures Göran Hammarström delivered at the Centre Universitaire de Luxembourg and the University of Trier in 1988, where he pointed out to the carelessness with which linguists normally use the term 'explanatory': if one is satisfied with an explanation of linguistic phenomena that accounts of intralanguage phenomena only, then no 'ultimate' explanation will ever be found, such efforts at 'explaining' ending up in a regressum ad infinitum; as a consequence 'ultimate' explanations of anguage phenomena will have to refer to the nonlinguistic world which ties in with our concept that we outlined initially: the external legitimation of what linguistics is doing!

On the whole the strong claims of structural contrastive analysis to predict errors to a large extent remained unfulfilled. As a consequence contrastive analysis in so far as it was based on behaviouristic principles, lost importance, and gradually got replaced by an investigation into the learner's hypothesis testing from one interlanguage stage to the next one (= errors), as Ellis (1985, chapter 3) points out in detail. On the other hand it should not be overlooked that the very restrictions of EA as mentioned above, caused that the older findings of contrastive analysis were not simply replaced but rather reinterpreted - from a mental point of view.

Thus the passage from contrastive analysis to EA,[16] as seen from today's point of view certainly was not a radical shift, but without doubt it exerted a catalytic function for the further developments of CL.

III.2 Universals

The role of universals research in CL can be compared with that of EA in so far as it also started in a structural linguistic fashion (the search for language universals as tertium comparationis for L1/L2 contrasts) and arrived at the process stage; though it adopted the latter not only for language description, but often with emphasis precisely on language acquisition.

In her very competent review of the literature Gass (1984) distinguishes for FLA between the role of static and dynamic approaches in the universals hypothesis.

The first approach inquires into the universal conditions for the formation of interlanguages. Here two directions are possible: firstly, to start from the ILs and to search for universals (and to link up the results with natural languages) and secondly, to begin with universals and via their relations in natural languages to find their correspondences in ILs. Gass arranges the directions according to an approach going back to Greenberg which is surface structure-oriented, based on the comparison of several languages,

[16] Various scholars regard contrastive analysis as a subdiscipline of error analysis on the-shaky-ground, that error analysis was concerned with all language errors whereas contrastive linguistics was concerned with errors solely arising from language contrast.

on the one hand, and one based on Chomsky which is deep-structure -oriented and is concentrated on one language.

Chomsky (1981) distinguishes grammatical features according to their centrality ranging from invariant, universal core features to periphery features, which pertain to specific features outside the core.

System contrasts are replaced now by marking contrasts. The (simplified) correlation of core/periphery with unmarked/marked was transferred to FLA/CL. The target was to distinguish between learning difficulties (universal/unmarked features are easier to learn?). The evidence adduced: well-formedness and hence core characteristics of ILs. The consequence: the starting point and contrastive background for FLA is no longer represented by L1, but by a universal core. - At least to a certain extent the accessibility to these universals seems to be hierarchically structured; thus Gass could demonstrate in her studies on relative clause types the effects of a hierarchical ordering of universals on foreign language acquisition as concerns accuracy of production, avoidance of structure, frequency of production and judgments of grammaticality and as concerns the fact that non-hierarchical ordering can be explained via source language/target language contrastive linguistic observations. - Without doubt, however, there are also universals that will not affect second language acquisition to such an extent, as everyday teaching experience shows; acceptability judgments on the side of the learner certainly play an important role there. (cf. Kellermann 1978: 47-51; 'he broke his leg' being more easily accepted than 'he broke his word').

Gass even postulates a universal topicality hierarchy, for example the implicational one ranging from human via animate to inanimate, within which the sequence implies a decrease in readiness to topicalize respective nouns.

Details still being controversial, one conclusion seems to be beyond doubt: universals do affect developing grammars.[17]

As the determining of universality is a task of linguistic theory formation to follow Gass would once again support an integral view

[17] cf. Gass (1984: 22): "[...] the acquisition of syntax cannot be adequately described without recourse to language universals."

of linguistic theory and application - at least when it comes to account for cross-language processes that operate in FLA.

A large number of still unanswered questions arises from the combination of research into universals and into transfer.

In connection with transfer research a number of open questions remain, to which numerous empirical studies are being directed (cf. Kean 1976: 82; with a modification of the model Zobl 1984: 80 ff.). However the boundaries between universal and core grammars, between the latter and ordered peripheries as well as between the latter and idiosyncratic peripheries are still by no means clear enough to allow uncontested categorial assignments - according to Lewandowska-Tomaszczyk (1983: 161) on account of the inadequate consideration of the pragmatic context of social interaction.

Gass (1984) subsumes under the heading of dynamic approaches ('developmental universals') a group which she calls 'language acquisition universals' and a group she calls 'language use universals'. The former are concerned with processes such as transfer, fossilization and generalization. It is indisputable that they occur in all FLA. This has led to the most discussed FLA-hypothesis in process CL: L2 acquisition proceeds according to the same processes as L1 acquisition and is hence uninfluenced by contrasts between L2 and L1.

In 1967 Corder spoke about a 'built-in syllabus' (166) in the learner, and yet it is still unexplained in which areas and to what extent it is supposed to apply. And in 1983 he postulated as starting point (and hence as contrastive basis) for FLA "a short or stripped-down version, a basic simple, possibly universal grammar" (1983: 95), which is then developed in the direction of the L2, with the L1 functioning as a heuristic discovery tool for the formal features of the L2. However, Corder allows the degree of 'stripping down' to vary along different language levels: whereas he sees the acquisition of L2-phonology as a successive restructuring of the L1, he proposes a kind of 'universal core' (instead of L1!) as the 'starting point' for the acquisition of L2-syntax - the problem being, of course, that both acquisition processes cannot be separated that rigorously.

But in the first place the so called 'L2 = L1-hypothesis', also known as 'creative construction paradigm (CC)', was based on the

work of Dulay, Burt and Krashen (1982). Many of these studies arose from considerations concerning first language acquisition. If they wished to claim validity for FLA, they had to prove the irrelevance of transfer. By uncovering the weaknesses of a behaviouristic notion of transfer, this approach led to a false logical conclusion and declared transfer and hence CL along with it as meaningless. - The current perspective includes the renewed recognition of the relevance of transfer (see below) but interpreted this time cognitively and not behaviouristically. The consequence is a reassessment of L1 prior knowledge for FLA and thence a connection between current process CL and the cognitive foundations of the L2 = L1-hypothesis which is ranged against it.[18]

The CC-paradigm was developed into an independent language acquisition theory along with Krashen's monitor model (1978): this sees the fundamental opposition of language acquisition and language learning; natural and thereby L1-independent sequences in the acquisition and mastery of morphemes; language learning is said to lead solely to the formation of a monitor which serves to correct utterances after they have been produced; the only condition for language acquisition: the amount of comprehensible 'input' - and thus the exclusion of all contrastively influenced progression - as furthered or hindered/blocked by an affective filter.

In our opinion the major point of criticism from the vantage point of CL is the following: despite the internal consistency of the model L1 influence on FLA is a daily empirical datum (reasons: where according to Krashen the 'acquired' system is the initiator of performance, its role is taken over in many FLA situations by L1 competence itself and this all the more so when an L1 structure cannot be corrected by the monitor and the L1 structure replaces it by interfering); there is insufficient consideration of the situation of learning and of the sociocultural embedding of the L1 vs. the L2 (cf. Sajavaara 1980: 146 ff.; Meyer 1986).

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[18] For a more detailed and critical presentation of the L2=L1-hypothesis or the CC-paradigm see Sajavaara & Lehtonen (1980: 15ff.), Gass & Selinker (1983: 6ff.), Ellis (1985: 7ff.) and Faerch & Kasper (1987: 111f.). A study that is worth especial mentioning is Raabe's original investigation of questions which foreign language learners formulated as they were learning; they were for the most part conditioned by prior knowledge of the L1, by an awareness of interlingual operations, that is they were contrastive and in particular process-contrastive (1983).

Furthermore the strict antagonism between acquisition and learning and the equivalent subconscious/conscious distinction can only have heuristic value; in gradually mastering a foreign language both go hand in hand. Nor is monitoring restricted to L2 productions but works with L1 productions as well: as Wiese (1984) found out when observing hesitation phenomena and speechrate in L1 vs. L2 (four groups: English L1, English L2, German L1, German L2), there was, it is true, more hesitation and a lower speechrate in L2, but: the difference was not a qualitative one but a quantitative one merely - an observation which led him to the hypothesis of 'an abstract knowledge based system common to all human beings' (23) and consequently the same for L1 use as for L2 use.

A more cybernetic counterargument is presented by Sajavaara (1982: 149), considering the simultaneity of many determinants of performance: the more performance capacity is needed for problem solving, the less will be left for monitoring. Though this is not a principal counterargument to Krashen's monitor concept, it would nevertheless subject it to gradiency.

III.3 Interlanguage

As early as in 1980 Carl James would simply regard contrastive analysis as interlanguage study. But, as was the case with EA and universals research, IL-research gradually moved beyond the structural linguistic frame; unlike structural contrastive linguistics but like error analysis interlanguage research does not intend to predict errors but rather to explain them.

Today it is very learner oriented, directed closely towards the CC- paradigm and hence makes a well-developed explanatory claim. On analogy with mentalistic theories of language the learner makes progress in FLA by constantly testing hypotheses and constantly restructuring a continuum of ILs, corresponding in process terms to the 'natural' sequence of L1 acquisition. The mentalistic embedding of the innate language acquisition device postulated by Chomsky raised a few difficulties, as it did not apply to the adult stage. So Selinker explains the undeniable FLA of adults by means of a latent psychological structure and of cognitive reactivational strategies (the cognitive organizer as the releaser of CC), which nonetheless come to a halt halfway: the fossilization of IL. As a reduced language variety IL can be

contrasted both formally and functionally with other reduced varieties such as creole, child languages and pidgin; but what is the degree of commonality of the processes behind them all?

A large number of empirical studies[19] have dealt with the permeability (in each IL stage the rules are extendable), with the evolving dynamism and systematicity of IL stages - features which make them contrastable with each other, providing CL is compatible, that is to say is process-oriented, does not limit itself to language form and, a fourth requirement with Long & Sato (1984 : 279), considers the context embedding of the performance of the learner. Such studies set themselves the same task (e.g. analyses of politeness, pauses, hesitations, gambits and many others) and make use of the following contrasts in performance: performance (1) L1 native speakers in L1 vs. L2 native speakers in L2, (2) L1 native speakers in L1 vs. the same in IL, (3) L1 native speakers in IL vs. L2 native speakers in L2. At the same time IL research cannot in our opinion dispense with contrastive system analysis (for heuristic and explanatory reasons) - even if this does not happen until a later phase of IL analysis (Faerch, Haastrup & Phillipson 1984: 290-291).

Of course the language teacher who is experienced in language and learning theory will make use in his planning of the features of every IL, in order to help the learner to progress to the next one, and hence will comprehend the simplification process[20] of the learner. The recommendation, however, which often is derived from this, that IL forms and functions which do not correspond to the L2 (earlier known as 'false') should be taught, that is to say the IL should be cultivated in the learner, is in my opinion to be rejected for psychological reasons connected with the memory.

We thus begin to see that IL theory which is closely connected with EA and universals research via its contrasts can be merely one of several components which a learning theory must take into consideration and which - for this reason in part - will be cognitively oriented to a large degree.

III.4 Transfer and cognition

[19] Warning: IL evidence is still problematic in that one form which does not (yet) correspond to the L2 can have several causes - a long recognized insight in EA.

[20] "In fact, child language, interlanguage, pidgin, and foreigner talk manifest universal features of simplicity." (James 1980: 159).

The radically different assessment of transfer according to the L2=L1 hypothesis (as irrelevant) and according to the structural hypothesis (the 'psychological cornerstone' of the latter: James 1980 :25) requires a reevaluation. The explanation, of what, when, why and how is transferred in language or (perhaps consciously) not transferred, increasingly follows external similarities and commonalities in social, ethnic-cultural and above all in psychical areas.[21]

In contrast to its behaviourist origins transfer is being increasingly viewed as "*a psycholinguistic procedure by means of which L2 learners activate their L1/Ln knowledge in developing or using their interlanguage*" (Faerch & Kasper 1987: 112). It occurs "when IL knowledge is either not available or less accessible than L1 knowledge (ibid. 1986: 63). Hence transfer is not merely a globally automatic phenomenon determined by structural differences, but becomes instead a problem-solving strategy whose load - and from this a computable typology - is dependent on the degree of linguistic-pragmatic competence which is given in each IL.

The concept of knowledge as it is used here can be integrated into a computational paradigm which can be related to the generative paradigm by means of its mentalistic nature. Its object is constituted by the structure of the processes between our perceptual apparatus and reality. These problem- solving processes lead to 'prototypes'. Hence each human being possesses e.g. for each lexicalized category (= a set of typical features) a prototypical (=ideal) example as a mental reference point for the decision whether a specific object can be designated by this lexeme or that lexeme (Cuyckens 1982: 66).[22]

What is to be contrasted within this cognitive framework are differences in perception and in the analysis of 'objective' reality, the different conceptual maps in the minds of people "which cause that both general patterns of knowledge as well as semantic categorization and semantic networks mapped onto the

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[21] There is a full catalogue of these problems in the afterword to the collection on transfer by Gass & Selinker (1983: 372-374).

[22] For a more detailed determination of the paradigm from the point of view of the philosophy of science with regard to six language production hypotheses which follow it cf. Dechert (1984).

conceptual schemes can also exhibit a smaller or greater range of variations." (Lewandowska-Tomaszczyk 1986: 107).

What needs further investigation in this recent variety of contrastive linguistics as analysis of perceptional contrasts is the borderline between the contrasts that are socioculturally determined and those which are idiosyncratic. What, actually, seems to us to be also inherent in Lewandowska-Tomaszczyk's statement is the need to go beyond these mappings of cognition towards those forces which are responsible for their patterning. We assume that this way will lead processual cognitive contrastive study directly to contrastive sociosemiotics (see below).

CL seen as the cross-language contrast of abstracted core 'gestalts', prototypes, obtains a notion of equivalence for the 'senses' which arise from different processing strategies for corresponding L1/L2 forms; cf. Krzeszowski's example of Polish nad vs. English over; 1986: 10-19: individual ways of using Polish nad can be 'scanned' in order to ascertain how near or far from the English over they are situated. By means of this 'pattern-matching' equivalence can gradually be determined.

For cognitively based contrastive analysis the concept of knowledge needs to be distinguished more finely as between declarative knowledge (about the L2, the IL, the L1, reality, for the most part influenced by learner-immanent factors) and procedural knowledge which has recourse to declarative knowledge (e.g. rules) and activates[23] learning and use processes.[24]

The connection shows that for FLA and foreign language use both kinds of knowledge are necessary. CL gains three dimensions from this: via declarative knowledge the contrast of language units and the possibilities of their combination, via procedural knowledge distinctions in strategies of activation and via both the contrasts L1-IL-L2. These are, first, in the case of productive language use the interface between every kind of L1-knowledge and

[23] On the reason for distinguishing the latter cf. Kohn (1986: 21-23).

[24] In FLA two processes cooperate in this: the activation of schemata, such as happens with L2 input, for example in the comprehension process, takes place on the one hand in a data driven fashion (bottom-up) and on the other hand in a concept driven fashion (top-down). Ringbom (1987: 39) emphasized that 'top-down' processing is much more pronounced the more difficult the L2 inputs are. Haastrup (1985) also discovered for the area of lexis that there is evidence for both extremes: pure top-down processing and pure bottom-up processing.

the communicative objective which is aimed for through the agency of IL means, then in the case of the receptive use of language, the interface between the L2 and L1-knowledge as the basis of interpretation, which is where interlingual 'inferencing' (Faerch & Kasper 1987: 113; cf. also Faerch, Haastrup & Phillipson 1984: 90) is carried out, as is the case with language learning.

In this connection it seems to me to be appropriate to view structural and process CL as no longer antagonistic but rather as inclusive. Where previously CL compared exclusively systems of structures, in future it will be dealing with systems of knowledge; and the latter contain among other things the knowledge of systems of structures too. This extraordinary extension of CL is simultaneously a limitation for it. This comes from the (universal) features, which are becoming more evident by means of the cognitive approach, and which in my opinion will become increasingly more clear in the area of procedural knowledge.

Both from CL and psycholinguistics the term 'cross-linguistic influence/analysis' is gaining in extension. And rightly so since it allows the theories, methods and results of all the following fields to mutually fertilize each other: transfer, avoidance strategies, L1 influences in both their promoting and blocking effect (instead of merely their structure-supporting role) on the L2 forms one can expect and on the speed with which the L2 forms are acquired. (List in Kellermann 1984: 102).[25]

Within the framework of a cognitive view of FLA the (renewed and strengthened) call for meta-communicative and hence meta-linguistic awareness as a learning objective is coming to be upgraded. And this is not the case for the pedagogical reason that it is easier to achieve it via L1/L2 contrast than it is via the L1 alone. Rather above all it is for the psycholinguistic reason that the awareness of contrast in the case of learners has also been incorporated into transfer research. Kellermann (1982, 1983) demonstrated the importance of psycholinguistic (vs. linguistic) markedness for FLA in an empirically founded study which looked at L1 Dutch breken and L2 English to break; it entailed learners estimating whether a specific feature in their L1 was more language specific or more language neutral. In the former case

[25] However the stringent modelling of this construct, which includes so many aspects, will present some difficulties.

transfer into the L2 took place with greater difficulty (for example in the case of metaphors). This correlation was also stronger than that with the linguistic feature pair of 'concrete/abstract'. Transfer was promoted in the cases where in the estimation of the learners it gave rise to a more systematic, more explicit and more logical IL (Kellermann's "reasonable entity principle"; vs. Andersen's "transfer to somewhere" principle (1983) which stresses the IL/L2 contrast more strongly by means of the filter effect of the L2-input already present in IL and hence which stresses L1 dependency less.)

Ringbom (1987: 33) insists that similarities between L1 and L2 should be heeded more markedly than hitherto by CL and transfer research, which tend towards overemphasizing negative transfer at the expense of positive transfer, and which furthermore disregards the subjective estimation of similarities on the part of learners. Ringbom diagnosed considerably stronger 'open' transfer, i.e. transfer on the basis of perceived L1/L2 similarities (vs. 'concealed' transfer) in the case of FLA with Swedish as L1 and English as L2, than in the case of Finnish as L1 and English as L2.[26]

This gives rise to a 'psychotypology' (Kellermann) concerning the relative proximity of languages; and since this is based on metalinguistic knowledge about the L1 it leads to the development of a species of 'subjective CL', which can lay claim to - yet again - predictive power as a theoretical construct.

In my opinion the greatest disadvantage of cognitive models is to be found (at least so far) in their paying too little attention to the reality of language discourse.[27]

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[26] As for the effect of relative mutual distance between languages on transfer - as related to universals - cf. also Gass (1983: 70). Cf. also Kirby (1984). For a detailed and up to date presentation of the relationship between linguistic universals, transfer and second language acquisition cf. (Ellis 1985: 201-206). For a catalogue of desiderata in transfer research (not, however, projected onto contrastive studies) cf. Gass & Selinker (1983, afterword).

[27] Jordens' (1983) investigation of interlanguage case marking systems produced a convincing relation between transfer effects and discourse functions of case marking systems; the interlanguages turned out to evince a relation between role and referential prominence (a function on the level of discourse) and between subject and object (a function on the level of grammar).

A further disadvantage lies in their often onesided orientation towards language comprehension (vs. production; cf. Johnson-Laird 1978). It is true such cognitive models do no longer focus on language structure but on the language user instead. However, the latter is viewed as mostly isolated from all relations, separated from social interaction, idealized so to speak.

The processes which can be described and contrasted must have been formed by some forces or other as strategies and must be released or avoided by some forces or other in the communicational event. In order to get closer to this "something or other", we are directed beyond process contrastive psycholinguistics - no matter how minimal its developments so far - to contrastive pragmatic and sociolinguistic, ethnolinguistic and sociosemiotic explanatory possibilities. These need to be followed up, since ultimately the objective of FLA is dealing with the discursive and rhetorical unfolding of texts.[28]

III.5 Discourse analysis

Most important for the future development of CL from structures to processes is the growing realization that dealing with texts in language acquisition and in language use also simultaneously activates factors of all the aforementioned interdisciplinary areas of interest and that thereby a hierarchical ordering of the factors is increasingly more difficult (or not even justified).

All the tendencies[29] discussed under section IV have cooperated in this re-orientation.

Although in the course of this decade theory and methods in these 'macrolinguistic' (James 1980) areas have been developed, the particular question as to their perspectives for CL and even more for FLA/CL shades into a list of desiderata in which furthermore

[28] This processually oriented intention ties in with the request of Sajavaara & Lehtonen (1986: 1444), not to contrast similarities and differences any longer but causal analogies, why and to what effect certain utterances are produced.

[29] Brumfit (1984: 314f.) lists a more detailed catalogue of the relevant factors according to disciplines: linguistics (communicative competence), anthropology (performance with regard to specific social contexts), social psychology (attitude towards fellow speakers as condition for language use), philosophy (speech acts), and ethnolinguistics (interactional conventions) - it is noticeable that psycholinguistics is not listed under a separate heading.

many things overlap. And also as far as methodological issues are concerned CL lacks close argumentation.

If we take the text-linguistic models which Enkvist (1984: 48-50) listed and vetted with a view to their contrastive potential, the following seem to offer within limits specific relevance for FLA - listed in increasing order of their explanatory power:

- Models based on the sentence unit allow one to determine the traces of pervasive text structure on the sentence level, for example differences in the choice, distribution and frequency of text cohesion in L1/L2.

- Cognitively oriented models can provide insights as far as production and comprehension of L2 texts is concerned into the way and the extent to which knowledge of the world including knowledge of genre-specific text features cooperate with language data of the L2.

- Interactionally conceived models can illuminate L1/L2 differences in dealing with speech acts and conversation management.

A major drawback of many pragmalinguistic contrastive analyses - in particular if they shall be related to FLA - consists of their being limited to the 'how' of differences in language-typical speech act realization.

As Rutherford (1983) noted in the case of English for the contrast of Mandarin and Japanese speakers, (sometimes wrong) surface structure forms can at times be understood as being dependent on their functions in discourse. Schachter and Rutherford (1979) give an example in which the sentence of a Japanese speaker "Most of food which served in such restaurant have cooked already" is not to be analyzed as a wrongly formed passive; instead it can be seen as the attempt to translate the topic-comment function into the English form. One used to criticize structural contrastive linguistics for isolating the individual language levels too sharply in the process of contrasting. But one could often accuse current pragmalinguistically oriented contrastive analyses of doing the same thing in the sense of separating themselves off too clearly from discourse functions.

In addition for FLA it is important to know whether and under which conditions a speech act in the L2 is not realized, which rhetorical strategies for discourse are typical for the L2 (Houghton & Hoey 1982, Clyne 1987), which rules politeness, reserve, fairness etc. (cf Grice 1975, Lakoff 1973) posit for the choice of conversation strategies, with which speech acts of inviting, telling someone not to come, requesting, thanking, accusing, apologizing etc. are uttered, and how they are introduced and completed, how a conversation is maintained or how it is terminated (cf. e.g. Littlewood 1983; Edmondson 1981 on so-called 'gambits' such as fixed phrases for reassuring, disarming people or expressing modesty etc.). And even if these pragmalinguistic and also the conversationally strategic correspondences for L1 and L2 have been completed, they can still have a very differential degree of importance ascribed to them in both languages. As this largely depends on how frequent they are in the corresponding languages, a quantitative determination should be possible. However, we lack the corresponding contrastive analyses based on extensive text corpora, and moreover this is the case for all the objects of pragmalinguistics which Fillmore (1984: 127) listed as 'large issues': systems of politeness, patterns of indirectness, repertoirs of register differences and patterns of rhetorical discourse organization.

All the present process tendencies of cross-language analysis which we have listed above can be added together to produce the kind of contrastive discourse analysis which is required in connection with contrastive rhetoric (on the latter compare Kaplan as long ago as 1966). We can include in the list of processes to be investigated here, among others, the different rhetorical processes when cultures which are orally transmitted meet up with cultures which are transmitted by writing (discussed by Houghton & Hoey 1982: 10). We can also include the relations between discourse and interlanguage in foreign language acquisition, since after all discourse constitutes the major input for today's instructional practice and also basically for most of the exercises used today (Allwright derives from this a catalogue of exercises for classroom discourse; 1984). And finally we can mention the impulses which transfer research has received from the quarter of contrastive discourse analysis and contrastive rhetoric, when culturally determined patterns of argumentation are contrasted with each other, for example tendencies towards

generalization or towards specification, etc. On this point Marmaridou (1988) demonstrates by means of an English-Greek dialogue (with the correspondingly different patterns of acceptance and rejection) what contrastive discourse analysis can mean for foreign language acquisition. Firstly it can "provide a mapping of the strategies employed by interlocutors in building discourse in different linguistic and sociocultural settings" (126) and secondly it can "indicate how different linguistic structures in different languages are used and exploited in order to develop specific functions in building discourse" (ibid.). The observation which Sajavaara and Lehtonen (1980: 11) made concerning contrastive text analysis and contrastive discourse analysis, namely that structure-centred considerations were dominant in both, fortunately is no longer true today.

A corresponding criticism has for this reason been levelled in CL at the criterion of equivalence which is seen purely in pragmatic terms.

It is noticeable that the insight that equivalence cannot be discovered in monocausal terms, that it is only by taking syntax, semantics and pragmatics together that a bundle of criteria for equivalence can be developed,[30] has been transferred to pragmatics itself. The resulting bundle of speech act type, its form of realization (e.g determined by differing degrees of politeness) and anticipated perlocutionary effect (Krzeszowski 1986: 9) need itself increasingly to be questioned:

- In the first place there is the general danger of a circular argument for a pragmatic tertium comparationis at the level of language use (this is controversial) (Janicki 1985).

- Secondly, there is the a.m. argument concerning frequency which is connected with the contextual factors (ibid.).

With a large variety of examples Weise (1988: 193) demonstrates that in English it would be possible to use a formulation like 'gradually went downhill' for the state of somebody injured in a traffic accident and lying in hospital, whereas the German

[30] The pragmatic demand which is hidden in the English expression: 'Could you please pass me the salt?' does not necessarily have to be, but may be, marked openly in Polish in the morphology: 'Czy mógłbys podac mi sól?' (Olesky 1986: 1410f.)

counterpart would not be acceptable: dependence of tertium comparationis on genre and social context!

FLA/CL finds itself faced with a fundamental problem as far as the social context is concerned. If sociolinguistics analyzes a language manifestation across several social groups (as is for the most part the case), this is of primarily theoretical-linguistic scientific interest. But if it holds the (previously sociologically defined) social group constant and investigates its language behaviour, the results may promise to be of use to FLA, but are limited by virtue of their exclusively theoretical-sociolinguistic orientation. If this is the case, the existing list of sociolinguistically relevant dimensions, which correlate with language phenomena, (setting, topic, emotional state, etc.) requires further reaching development (Janicki 1984).

From a cognitive point of view equivalence which is understood in pluralist terms can only be scaled, depending on the proximity of the 'equivalent' to the prototype (see above; the fewer differing implications and contextual conditions that are necessary for the interpretation, the more prototypical the equivalent; cf. Kalisz 1984 and also Krzeszowski 1986).

In this way CL arrives at a combination of social and psychical components at the level of text and at a combination of the two with the access of knowledge of the world of signness - including language too - and non-signness: the cognitive contrastive analysis of social interaction (for sketches of models cf Lewandowska-Tomaszczyk 1983: 163 and with a stronger accentuation of the psychological component Sajavaara 1984: 392).

This takes CL beyond purely pragma- or purely sociolinguistic conditions in the above mentioned sense to sociopragmatic and above all to sociocultural ones.

Thomas (1983: 99) convincingly distinguishes for FLA between 'pragmalinguistic' and 'sociopragmatic' errors. The former occur in the case of contrasts when pragmatic factors are rendered into language, the latter are to do with the differing ideas which vary from one language or cultural community to another about what counts as appropriate language behaviour.

One could add from transfer research the sociocultural-contrastive findings of Olshtain (1983): the unambiguous transfer of mother tongue patterns of for what and how people apologize in which situations.

Among other things this will lead CL to an increased interest in the role of discourse universals (cf. Marmaridou) - even subjectively experienced ones - for FLA, if we assume that language-given or / and assumed universality and transfer correlate.[31]

One could also add the ethnolinguistical-contrastive findings of Tannen (1984: 189ff.): When do people speak in the first place (One's own conventions lead to stereotyping of others)? What do people speak about, do people ask questions and about what do people crack jokes? How quickly do people speak, under what conditions and why do people deviate? How much time does one leave until one makes a personal speaking contribution (note 'unpleasant silence')? When and how do people signal attention (eye contact as one is speaking vs. when one is being spoken to)? What is the form of the pragmatically unmarked intonational curve ('It's not what you say but the way that you say it')? What is the norm in the relation between prefabricated versus novel language elements which are more significant in information terms? Do people normally say straight out what they mean? Do people usually stress the features which they consider to be important? (What effects does this have on cohesion)? Is coherence created by means of an argumentative structure (vs. e.g. by means of repetition)?

In order to be able to contrast such phenomena not merely impressionistically, but in a systematic fashion, contrastive discourse analysis needs to be related to universals research. This means, as House (1985) notes: interactional universals (like e.g. 'proffer', 'satisfy', 'contra') as tertium comparationis, the interactional structure providing the slots in conversation, the illocutionary acts providing the fillers. A universal determining of discourse functions is possible for contrastive discourse analysis; what varies, however, is the appropriateness of the topics and/or their linguistic organisations (cf. Marmaridou 1988; cf., too, Faerch, Haastrup & Phillipson 1984: 62ff.).

[31] Scarcella (1983) diagnosed greater and more pronounced transfer in the case of assumed similarity between L1 and L2 at the suprasegmental discourse level also.

If questions of this nature are to be answered differently for L1 or culture 1 than for L2 or culture 2, then it is evident what grave misunderstandings can occur in precisely this area of frequently attested transfer of L1 to L2 performance. Investigations in these areas will doubtless bring to light further evidence (cf. also the material in Weeks 1983 (1976), Liebe-Harkort 1985). Although it will still long await systematic description. But the fact that such work is necessary for FLA is substantiated by the common ground which all the investigations manifest: errors which have their origin in abnormal behaviour of a sociopragmatic, sociocultural or ethnolinguistic nature incur much stronger sanctions than those of a phonetic, semantic, syntactic or even of pragmatic nature: it is more difficult to cope with them in FLA!

IV. Cognition, social interaction and contrastive sociosemiotics

In order not to become anecdotal the description which we have recognized as being desirable of the presented phenomena requires a theoretical and methodological frame. Such can supply the cognitive-contrastive analysis of social interaction, if cognition and social interaction find a common reference point.

My hypothesis is as follows:

> The reference point between cognition and social interaction is to be found in sociosemiotics.

Its derivation is as follows:

(1) The actualization and individual variation of social behaviour (including language behaviour) takes place within sociocultural practices.[32] Behaviour is semiotic as interaction (vs. mere 'happenings'). Social interaction takes place in sociosemiotic terms.

(2) Cognition produces knowledge from the recognition of reality. This process does not take place in a vacuum. It

[32] It can also be directed against these conventions, but if so, it is related to the former via sanctions.

too is socioculturally relative. New knowledge which is acquired individually and in relation to the current situation is assimilated to previous knowledge.[33] This is not random but ordered: following normal cognitive and thought schemata of the relevant language and culture community.[34]

This process too is semiotically directed. Depending on different socioculturally preordained facts (including spaces for individual variation) reality exercises a differential 'semiotic impact', which allows cognition to correspondingly develop in a differential fashion.[35] We have derived this position on cognition from empirical contrastive-semantic studies and discussed them since 1982 in several places, so that a reference at this point to, e.g., Kühlwein (1989) will suffice instead of further details.

Cognition like social interaction is of a sociosemiotic nature.[36]

Hence we arrive at a form of CL

- which takes as its object of study social, including language, interaction in differing culture and language spheres,

- which views and describes this object by having recourse to the cognitive processes which underlie it and

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[33] 'Previous knowledge' does not contradict the hypothesis of biological universals.

[34] The relativized character of the epistemological process can be directed up to a corresponding relative point by reality itself: Lewandowska-Tomaszczyk (1986: 109): "[...] the assumption that sets of individuals, their properties, etc., are not unique components in terms of which the universe (the language) can be described."

[35] Sajavaara, Lehtonen & Korpimies (1980: 42) argue for a corresponding position: "Human perceptions are generally structured by cultural conditioning, education, and personal experience", from which it follows that "the observations are affected by preconceived ideas of what is to be seen or heard." Ventola (1984: 276ff.) rightly stresses that so far we lack a theory of cross-cultural contrasts of sociosemiotic correspondences or genres and registers (e.g. different evaluations of one genre in different cultures or the same social activity carried out in different ways in different cultures etc.). Contrastive statements on such areas remain for this reason largely anecdotal.

[36] The real nature of this process is expressed in folk tradition much more simply: 'Beauty is in the eye of the beholder' or: 'One man's meat is another man's poison.'

- which links and explains the object and the view or description of the object in sociosemiotic terms.

At the same time both descriptive and explanatory adequacy are ensured. And in this way CL brings two research approaches on this foundation into relation with one another: cognitive linguistics stemming from gestalt psychological roots on the one hand and sociosemiotics originating from contextual-text-linguistic roots on the other. Both are increasingly developing in a healthy fashion, but for the most part in separation from one another and only partially in a mutual relation. This, however, is necessary in order to allow our hypothesis to become a theory and hence to provide a model.

Since the results of these semiotic processes decisively affect (foreign) language use, their contrasting is of eminent relevance for FLA. This will take the sociosemiotic comparison of genres[37] or registers (for example in the Hallidayan sense) as a starting point and pose four questions:

- What is the nature of the differences in the evaluation of the relevant genre/register?

- How differently can the genre as a reflection of social processes be manifested in its character as the realization of general sociocultural contexts?

- In what differing ways do these processes/genres become manifested in texts?

- Where are the differences to be found in the use of these texts, that is to say which varying communicative skills and strategies lead them to achieve their intended objective?

The order reflects a sequence of realization. It proceeds from the sociosemiotic via the links genre and text to language features. In teaching terms the order can of course proceed in the opposite direction or stage by stage in a balanced fashion it could be followed in terms of a move and countermove. Ventola (1983a,b 1984) has demonstrated convincingly in my opinion using the example of 'service encounters' how FLA can make use of CL which

[37] The notion of genre is currently very controversial: we understand genres to include, e.g., making appointments, committee meetings, lonely hearts columns, etc.

relates social and hence language interaction to differential semiotic processing.

In this way CL ought regain a portion of predictive power. By viewing culture-specific semiotic processes as explanations for corresponding differences in cognitive processes one could at least predict the differences between L1 and L2 as far as the language options holding for communication are concerned.

LITERATUR

Aarts, F. 1982. "The Contrastive Analysis Debate: Problems and Solutions". In: *Studia Anglica Posnaniensia* 14: 47-68.

Aarts, F. & H. Wekker 1987. "The Search For an Ideal Theoretical Model in Applied Contrastive Linguistics: A Wild Goose Chase?" In: Sajavaara, K. (ed.), 5-17.

Akhmanova, O. & D. Melencuk. 1977. *The Principles of Linguistic Confrontation*. Moscow: Moscow University Press.

Alatis, J. E. (ed.) 1968. *Contrastive Linguistics and its Pedagogical Implications*. Report of the 19th Annual Round Table Meeting on Linguistics and Language Studies. (Monograph Series on Languages and Linguistics .21) Washington, D.C.: Georgetown University Press, . (12)

Allwright, R.L. 1984. "The Analysis of Discourse in Interlanguage Studies: the Pedagogical Evidence." In: Davies, A., Criper, C. & A.P.R. Howatt, (eds.), 204-219.

Andersen, R. W. 1983. "Transfer to somewhere". In: Gass, S. & L. Selinker (eds.), 177 - 204.

Arabski, J. 1979. *Errors as Indicators of the Development of Interlanguage*. Katowice: Universytet Slaski.

Bausch, K.-R. 1973. "Kontrastive Linguistik." In: Koch, W.A. (ed.). *Perspektiven der Linguistik*. I. Stuttgart: Kröner, 159-182.

Böhme, G.; Daele, W. v.d. & R. Hohlfeld 1978. "Finalisierung revisited." In: Böhme, G. et. al. (eds.). *Die gesellschaftliche Orientierung des Fortschritts*. (Starnberger Studien No 1). Frankfurt:, 195-250.

Brumfit, C. 1984. "Theoretical Implications of Interlanguage Studies for Language Teaching." In: Davies, A., Criper, C. & A.P.R. Howatt et. al. (eds.), 312-323.

Chomsky, N. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.

Clyne, M. 1987. "Cultural Differences in the Organization of Academic Texts: English and German". *Journal of Pragmatics* 11: 211 - 247.

Corder, S.P. 1967. "The significance of Learner's Errors." *IRAL* 5: 161-170.

Corder, S.P. 1983. "A Role for the Mother Tongue." In: Gass, S. & M. Selinker (eds.), 85-97.

Courtenay, B.J. de. 1912. *Pol'skij jazyk sravnitel'no s russkim i drevnecerkonoslavjanskim* (The Polish Language compared with Russian and Old Church Slavonic): St. Petersburg.

Cuyckens, H. 1982. "Componential Analysis in Psycholinguistics." *ITL* 57: 53-75.

Davies, A., Criper, C. & A.P.R. Howatt, A. (eds.) 1984. *Interlanguage*. Edinburgh: Edinburgh University Press.

Dechert, H.W. 1984. "Second Language Production: Six Hypotheses." In: Dechert, H. W.; Möhle, D. & M. Raupach (eds.), 211-230.

Dechert, H. W., Möhle, D. & M. Raupach (eds.). 1984. *Second Language Productions*. Tübingen: Gunter Narr Verlag.

DiPietro, R.J. 1971. *Language Structures in Contrast*. Rowley, Mass.: Newbury House.

Dulay, H. & M. Burt. 1974. "Natural Sequences in Child Second Language Acquisition". *Language Learning* 24/1: 37 - 53.

Dulay, H.L., Burt, M.K. & S.D. Krashen 1982. *Language Two*. Oxford/New York: Oxford University Press.

Eckman, F. 1977. "Markedness and the contrastive analysis hypothesis". *Language Learning* 27: 315 - 330.

Edmondson, W. 1981. *Spoken Discourse: A Model for Analysis*. London: Longman.

Ellis, R. 1985. *Understanding Second Language Acquisition*. Oxford: Oxford University Press.

Enkvist, N.E. 1984. "Contrastive linguistics and text linguistics". In: Fisiak, J. (ed.), 45 - 67.
Engels, L.K. 1979. "Pedagogical Grammars:" *Glottodidactica* 12: 13-34.
Faerch, C. & G. Kasper 1986. "Cognitive Dimensions of Language Transfer." In: Kellermann, E. & M. Sharwood Smith (eds.),
Faerch, C. & G. Kasper 1987. "Perspectives of Language Transfer". *Applied Linguistics* 8/2: 111 - 136.
Faerch, C., Haastrup, K. & R. Phillipson. 1984. *Learner Language and Language Learning*. Copenhagen: Gyldendal; Clevedon: Multilingual Matters.
Fillmore, C.J. 1984. "Remarks on contrastive pragmatics." In: Fisiak, J. (ed.), 119 - 141.
Fisiak, J. (ed.). 1984. *Contrastive Linguistics*. Prospects and Problems. Papers Prepared for the 4th International Conference of Contrastive Projects Held at Charzykowy, Poland, 3-6 December 1980. Berlin, New York, Amsterdam: Mouton.
Fried, V. 1965. "The Prague School and Foreign Language Teaching". *Prague Studies in English* 11: 15 - 32.
Fries, C.C. 1945. *Teaching and Learning English as a Foreign Language*. Ann Arbor, Mich.: University of Michigan Press.
Gass, S. 1983. "Language Transfer and Universal Grammatical Relations." In: Gass, S. & L. Selinker (eds.), 69-84.
Gass, S. 1984. "The Empirical Basis for the Universal Hypothesis in Interlanguage Studies". In: Davies, A., Criper, C. & A.P.R. Howatt (eds.), 3-24.
Gass, S. & L. Selinker 1983. "Introduction". In: Gass, S. & L. Selinker (eds.), 1-20.
Gass, S. & L. Selinker (eds.) 1983. *Language Transfer in Language Learning*. Rowley, Mass.: Newbury House.
Grice, H.P. 1975. "Logic and Conversation." In: Cole, P. & J.L. Morgan (eds.). *Syntax and Semantics III. Speech Acts*. New York: Academic Press, 41-58.
Haastrup, K. 1985. "Lexical Inferencing - A Study of Procedures in Reception". *Scandinavian Working Papers on Bilingualism* 5: 63 - 86.
Hammarström, G. 1987. "Multiple and Mutual Conditioning of Variants". In: Bluhme, H. & G. Hammarström (eds.). *Descriptio Linguistica*. Proceedings of the First Conference on Descriptive and Structual Linguistics, Antwerp 9 - 10 September 1985. Tübingen: Narr, 114-120.
Hansen, K. 1985. "Trends and Problems in Contrastive Linguistics". *Zeitschrift für Anglistik und Amerikanistik* 33: 117 - 132.
Harris, Z. 1954. "Transfer grammar." *International Journal of American Linguistics* 20: 259-270.
Haugen, E. 1953. *The Norvegian Language in America. A Study in Bilingual Behaviour* 2 Vols. Philadelphia: University of Pennsylvania Press.
Houghton, D . & M. Hoey 1982. "Contrastive Rhetorics". *Annual Review of Applied Linguistics* o.B.: 2 - 22.
House, J. 1985. "Contrastive Discourse Analysis in Language Usage." *Papers and Studies in Contrastive Linguistics* 20: 5-14.
James, C. 1980. *Contrastive Analysis*. Harlow, Essex: Longman.
Janicki, K. 1984. "Contrastive Sociolinguistics Reconsidered. *PSICL* 18: 15 - 30.
Janicki, K. 1985. "On the Tenability of the Notion 'Pragmatic Equivalence' in Contrastive Linguistics". *PSICL* 20: 19 - 26.

Johnson-Laird, P.N. 1978. *Mental Models of Meaning. Paper presented to Sloan Workshop on Computational Aspects of Linguistic Structure and Discourse setting.* University of Pennsylvania, May 24-27. Mimeo.
Jordens, P. 1980. "Interlanguage Research: Interpretation or Explanation." *Language Learning* 30/1: 195-207.
Jordens, P. 1983. "Discourse Functions in Interlanguage Morphology." In: Gass, S. & L. Selinker (eds.), 327-357.
Kalisz, R. 1986. "More on Pragmatic Equivalence". In: Kastovsky, D. & A. Szwedek (eds.), 1247 - 1256.
Kaplan, B. 1966. "Cultural Thought Patterns in Inter-Cultural Education." *Language Learning* 16: 1-20.
Kastovsky, D. & A. Szwedek (eds.) 1986. *Linguistics across Historical and Geographical Boundaries.* Vol. 2: *Descriptive, Contrastive and Applied Linguistics. In Honour of Jacek Fisiak on the Occasion of His Fiftieth Birthday,* Berlin/New York/Amsterdam: de Gruyter.
Kean, M.L. 1976. " 'Natural Processes' and 'Learned rules' in markedness theory." *Proceedings of the Annual Meeting of the North Eastern Linguistic Society* 7: 135-146.
Kellermann, E. 1978. "Transfer and non-transfer: Where we are now?" *Studies in Second Language Acquisition* 2: 37-57.
Kellerman, E. 1982. "Predicting transferability from semantic space: an investigation of translation preferences for a polysemous word". *Studia Anglica Posnaniensia* 14: 197 - 220.
Kellerman, E. 1983. "Now You See It, Now You Don't". In: Gass, S. & L. Selinker (eds.), 112 - 134.
Kellerman, E. 1984. "The Empirical Evidence for the Influence of the L1 in Interlanguage". In: Davies, A., Criper, C. & A.P.R. Howatt (eds.), 98 - 122.
Kellerman, E. & M. Sharwood Smith 1986. (eds.): *Crosslinguistic Influence in Second Language Acquisition.* Oxford: Pergamon Press.
Kirby, J.P. 1984. "Error Ananlysis and Interlanguage Studies." *ITL* 63: 65-80.
Klegraf, J. & D. Nehls (eds.). 1988. *Studies in Descriptive Linguistics. Essays on the English Language and Applied Lingusitcs on the Occasion of Gerhard Nickel's 60th Birthday.* Heidelberg: Groos.
Kohn, K. 1986. "The Analysis of Transfer." In: Kellerman, E. & M. Sharwood Smith (eds.), 21 - 34.
Krashen, S.D. 1978. "The Monitor Model for second language acquisition." In: Gingras, R.C. (ed). *Second Language Acquisition and Foreign language learning.* Arlington, Va.: Center for Applied Linguistics.
Krashen, S. D. 1982. *Principles and Practice in Second Language Acquisition.* Oxford: Pergamon.
Krzeszowski, T.T. 1986. "Prototypes and Equivalence". *PSICL* 21: 5 - 20.
Kuhn, T.S. 1962. *The Structure of the Scientific Revolution.* Chicago:
Kühlwein, W. 1973. "Grammatiktheorie und Sprachdidaktik." In: Baumgärtner, K. et.al. (eds.). *Funk-Kolleg Sprache.* Eine Einführung in die moderne Linguistik. Frankfurt: Fischer, 103-112.
Kühlwein, W. 1975. "Grundfragen der kontrastiven Linguistik". *Neusprachliche Mitteilungen* 28: 80 - 92.
Kühlwein, W. 1987. "The Need for Integration of Applied and Theoretical Linguistics: Research Objects, Research Goals". In: Miseska T. & R. Shuy (eds.): *The Relation of Theoretical and Applied Linguistics,* New York: Plenum, 51 - 74.
Kühlwein, W. 1987. "Externality and finalization in linguistics". *AILA-Review* 4, 9 - 24.

Kühlwein, W. 1988. "David Hume: 'Let your science be human"' In: Klegraf, J. & D. Nehls (eds.). *Studies in Descriptive Linguistics. Essays on the English Language and Applied Lingusitcs on the Occasion of Gerhard Nickel's 60th Birthday.* Heidelberg: Groos, 329-341.

Kühlwein, W. 1989. "Kontrastive Linguistik und Fremdsprachenerwerb - Perspektiven und historischer Hintergrund -." In: Gnutzmann, C. (ed.) *Kontrastive Linguistik.* Forum Angewandte Linguistik .19. Tübingen: Narr, xx-xx.

Lakoff, R. 1973. "The Logic of Politeness; or Minding Your P's and q's". In: Corum, C., Smith-Stark, C. & A. Weiser (eds.). *Papers from the 9th Regional Meeting of the Chicago Linguistic Society.* Chicago: Chicago Linguistics Society, 1973, 292 - 305.

Levenston, E. 1979. "Second Language Acquisition: Issues and Problems." *Interlanguage Studies Bulletins* 4/2: 147-160.

Lewandowska-Tomaszczyk, B. 1983. " 'Some Psychological Aspects of Contrastive Pragmatics' or 'In Search of a Cognitive Contrastive Analysis of Social Interaction (CCASI)'". In: Sajavaara, K. (ed.) 1983a, 157 - 170.

Lewandowska-Tomaszczyk, B. 1986. "Cognitive Basis for Dynamic Semantics". *Studia Anglica Posnaniensia* 19: 107 - 118.

Liebe-Harkort, M.-L. 1985. "Contrastive Pragmatics". *Papers and Studies in Contrastive Linguistics* 19: 23 - 28.

Lightbown, P.M. 1984. "The Realtionship between Theory and Method in Second Language Acquisition." In: Davies, A., Criper, C. & A.P.R. Howatt (eds.), 241-252.

Littlewood, W. T. 1983. "Contrastive Pragmatics and the Foreign Language Learner's Personality". In: Sajavaara, K. (ed.), 179 - 188. Also: *Applied Linguistics* 4/3: 200-206.

Long, M.H. & C.J. Sato 1984. "Methodological Issues in Interlanguage Studies: An Interactionist Perspective." In: Davies, A., Criper, C. & A.P.R. Howatt (eds.), 253-279.

Marmaridou, S. 1988. "Contrastive Analysis at Discourse Level and the Communicative Teaching of Languages". *Papers and Studies in Contrastive Linguistics* 22: 123 - 132.

Marton, W. 1972. "Pedagogical Implications of contrastive studies." *Studia Anglica Posnaniensia* 4: 115-126.

Mathesius, V. 1927. "Linguistická characteristika a její místo v moderním jazykozpytu" (Linguistic characterology and its place in modern linguistics). *CMF* 13: 35 - 40.

Meyer, H. J. 1986. "Krashens Theorie des Spracherwerbs - Ein Weg zur Lösung der Probleme des Sprachunterrichts?" *Wissenschaftliche Zeitschrift der Wilhelm-Pieck-Universität Rostock* 35: 8 - 12.

Nemser, W. 1971. " Approximative Systems of Foreign Language Learners", *IRAL* 9: 115-23.

Nickel, G. & D. Nehls (eds.) 1982. *Error Analysis, contrastive analysis and second language learning.* Heidelberg: Groos.

Oleksy, W. 1986. "Some recent approaches to equivalence in Contrastive Studies". In: Kastovsky, D. & A. Szwedek (eds.), 1405 - 1420.

Olshtain, E. 1983. "Sociocultural Competence and Language Transfer: The Case of Apology". In: Gass, S. & L. Selinker (eds.), 232 - 249.

Raabe, H. 1983. "The Influence of the First Language: An Analysis of Learner's Questions". In: Sajavara, K. (ed.), 53 - 65.

Ringbom, H. 1987. *The Role of the First Language in Foreign Language Learning.* Clevedon, Phil.: Multilingual Matters.

Robinett Wallace, B. & J. Schachter (eds.) 1983. *Second Language Learning.* Contrastive Analysis, Error Analysis, and Related Aspects. Ann Arbor: The University of Michigan Press.

Rusiecki, J. 1976. "The Development of Contrastive Linguistics. *Intralanguage Studies Bulletin* 1: 12 - 44.
Rutherford, W. 1983. "Language typology and language transfer." In: Gass, S. & L. Selinker (eds.), 358-370.
Sajavaara, K. 1982. "The Monitor Model and contrastive analysis." *Papers & Studies in Contrastive Linguistics* 14: 145-155.
Sajavaara, K. 1983a. (ed.). *Cross Language Analysis and Second Language Acquisition* Vol. 1. (Jyväskylä Cross-Language Studies No. 9). Jyväskylä: University Press.
Sajavara, K. 1983b. (ed.). *Cross-Language Analysis and Second Language Acquisition* Vol. 2. (Jyväskylä Cross-Language Studies No. 10). Jyväskylä: University Press.
Sajavaara, K. 1984. "Psycholinguistic Modells, Second Language Acquisition and Contrastive Analysis". In: Fisiak, J. (ed.), 379 - 408.
Sajavaara, K. (ed.) 1987. *Applications of Cross-Language Analysis.* (Jyväskylä Cross-Language Studies No. 12). Jyväskylä: University Press. (Rev. & exp. version of a paper given on August 10, 1984 at the symposium on Contrastive Analysis and Error Analysis, AILA Congress, Brussels),
Sajavaara, K. & J. Lehtonen. 1980. "Prisoners of Code-Centered Privacy: reflections on Contrastive Analysis and Related Disciplines." In: Sajavaara, K. & J. Lehtonen (eds.), 7-26.
Sajavaara, K. & J. Lehtonen (eds.). 1980. *Jyväskylä Contrastive Studies*, 5: *Papers in Discourse and Contrastive Discourse Analysis.* (Reports from the Department of English, University of Jyväskylä No. 6) Jyväskyklä: Jyväskylä University Press.
Sajavaara, J. & J. Lehtonen. 1986. "The mother tongue and the foreign language in interaction." In: Kastowsky, D. & A. Szwedek (eds.), 1443-1456.
Sajavaara, K.; J. Lehtonen & L. Korpimies 1980. "The Methodology and Practice of Contrastive Discourse Analysis". In: Sajavaara, K. & J. Lehtonen (eds.), 27 - 55.
Saussure, F. de. 1916. *Cours de Linguistique Générale.* Publié par C. Bally et A. Sechehaye. Lausanne: Payot.
Scarcella, R.C. 1983. "Discourse Accent in Second Language Performance." In: Gass, S. & L. Selinker (eds.), 306-326.
Schachter, P. 1959. *Contrastive Analysis of English and Pangasinan.* Los Angeles: (1960)
Schachter, J. & W. Rutherford 1983. "Discourse Function and Language Transfer." In: B. Wallace Robinett & J. Schachter (eds.), 303- 315. (orig.: 1979, *Working Papers on Bilingualism* 19: 1-12)
Selinker, L. 1972. "Interlanguage". *IRAL* 10: 209-31.
Stockwell, R. 1957. *Contrastive Analysis of English and Takalog.*
Straková, V. 1985. "Typology and Contrastive Analysis". Papers and *Studies in Contrastive Linguistics* 20: 15 - 18.
Tannen, D. 1984. "The pragmatics of cross-cultural communication". *Applied Linguistics* 5/3: 189 - 195.
Thomas, J. 1983. : "Cross-cultural Pragmatic Failure". *Applied Linguistics* 4,2: 91 - 112.
Trager, G. L. 1949. *The Field of Linguistics. Studies in Linguistics.* (Occasional Papers No 1) Oklahoma: Battenburg.
Ventola, E. 1983a. "Contrasting Schematic Structures in Service Encounters". *Applied Linguistics* 4/3: 242 - 258.
Ventola, E. 1983b. "Interactive Play of Signalling Discourse Element Boundaries in Service Encounters". *Grazer linguistische Studien* 20: 171 - 192.
Ventola, E. 1984. "Orientation to Social Semiotics in Foreign Language Teaching". *Applied Linguistics* 5/3: 275 - 286.
Vietor, W. 1894. *Elemente der Phonetik des Deutschen, Englischen und Französischen.* 3rd rev. ed. Leipzig: Reisland.

Wardhaugh, R. 1970. "The Contrastive Analysis Hypothesis". *TESOL Quarterly* 4: 123 - 130.
Weeks, T.E. 1983. "Discourse, Culture, and Instructions". In: Robinett Wallace, B. & J. Schachter (eds.), 120 - 135, (Orig: 1976).
Weinreich, U. 1953. *Languages in Contact*. The Hague/Parie: Mouton.
Weise, G. 1984. "Contrastive studies and the problem of equivalence in translation." *PSICL* 22: 187-194.
Whorf, Benjamin Lee, "Languages and Logic." In: *Technology Review* (M.I.T.), 43 (1941). S. 250-252, 266, 268, 272.
Whitman, R.L. & K.L. Jackson 1972. "The unpredictability of contrastive analysis." *Language Learning* 22: 29-42.
Wiese, R. 1984. "Language Production in Foreign and Native Languages: Same or Different?." In: Dechert, H.W., D. Möhle & M. Raupach (eds.), 11-25.
Zobl, H. 1984. "Cross-generalizations and the contrastive Dimension of the Interlanguage Hypothesis". In: A. Davies, Criper, C. & A.P.R. Howatt (eds.), 79 - 87.